

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) An image processing apparatus comprising:

image entering means for reading slice data;

image processing means for being supplied with slice data read by said image entering means and processing the supplied slice data into reconstructed image data; and

memory means for storing data;

said memory means comprising:

slice data storage means for storing slice data supplied to said image processing means; and

reconstructed image data storage means for storing reconstructed image data produced by said image processing means;

said image processing means comprising:

significance detecting means for determining whether the slice data stored in said slice data storage means is of significance or not;

moved distance/tilt calculating means for calculating a moved distance and tilt of the slice data that has been detected as being of significance by said significance detecting means; and

reconstructed image data generating means for calculating positional coordinates of a reconstructed image area to which said slice data is to be projected, based on the moved distance and tilt of the slice data which has been calculated by said moved distance/tilt calculating means, and generating reconstructed image data.

2. (original) An image processing apparatus according to claim 1, wherein said image processing means comprises means for starting processing the slice data if the slice data is determined to be of significance by said significance detecting means, and ending processing the slice data if the slice data is determined to be of no significance by said significance detecting means.

3. (original) An image processing apparatus according to claim 1, wherein said moved distance/tilt calculating means comprises means for calculating an overall moved distance and tilt of the slice data by determining relative positions of a plurality of moved distance detecting windows provided for the slice data.

4. (original) An image processing apparatus according to claim 1, wherein said reconstructed image data generating means comprises means for dividing each pixel of the slice data

into fragments at a ratio of occupied areas with respect to a maximum of four pixels of said reconstructed image area onto which each pixel of the slice data is to be projected, and distributing the divided fragments to the pixels of said reconstructed image area, thereby generating the reconstructed image data.

5. (original) An image processing apparatus according to claim 1, wherein said image entering means comprises a fingerprint reading sensor.

6. (original) An image processing apparatus according to claim 1, wherein said image entering means comprises a sensor for use with a hand scanner.

7. (original) An image processing apparatus according to claim 1, wherein said image entering means comprises a line sensor.

8. (currently amended) A method of processing an image, comprising the steps of:

storing slice data read by an image entering unit;  
detecting significance of the stored ~~slide~~ slice data;  
calculating a moved distance and tilt of the ~~slide~~ slice data which has been detected as being of significance;

calculating positional coordinates of a reconstructed image area to which said slice data is to be projected, based on the moved distance and tilt of the slice data which have been calculated, and generating reconstructed image data; and  
storing the generated reconstructed image data.

9. (currently amended) A computer-readable medium encoded with a computer program ~~for~~ enabling a computer to process an image, computer-readable medium comprising:

a first instruction set enabling the computer to store ~~storing~~ slice data read by an image entering unit;

a second instruction set enabling the computer to detect a ~~for detecting~~ significance of the stored ~~slide~~ slice data;

a third instruction set enabling the computer to calculate ~~for calculating~~ a moved distance and tilt of the ~~slide~~ slice data which has been detected as being of significance;

a fourth instruction set enabling the computer to calculate ~~for calculating~~ positional coordinates of a reconstructed image area to which said slice data is to be projected, based on the moved distance and tilt of the slice data which have been calculated, and to generate a ~~generating~~ reconstructed image data; and

a fifth instruction set enabling the computer to store ~~for storing~~ the generated reconstructed image data in a memory.